

**Massachusetts Division of Marine Fisheries
Fisheries Policy FP-1**

**Management of the Massachusetts
Commercial Striped Bass Fishery**

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Executive Office of Environmental Affairs
Commonwealth of Massachusetts**

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FISHERIES POLICY

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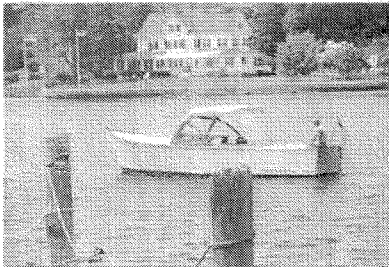
This white paper describes the policy of the Commonwealth to conduct a commercial fishery for striped bass. The fishery will make fresh wild-caught striped bass available to end users during the time fish are abundant in our waters and in a manner that maximizes product marketability. The tradition of open access participation in the fishery will be continued in an attempt to foster the cultural aspects of the fishery and to support those that may be interested in pursuing fishing as an occupation or as a gateway to other employment in the marine economy. Specific goals include halting decline in ex-vessel prices, conducting longer fishing seasons, creating less market glut, allowing unlimited entry to the fishery, and maintaining equal fishing opportunity for all participants.

Background and History

Commercial fishing in the United States predates the birth of the Nation. Historical writings talk about Bay State settlers sending barrels of striped bass to England in exchange for currency and building materials needed to construct some of the first public schools in Massachusetts. Fish migrating in spring from the mid-Atlantic flooded our rivers in their chase to feed on river herring. Capturing schools of stripers in large quantities in New England rivers was easily accomplished at the time by using nets to pound or seine fish. An unusual distribution pattern today but common then was the tendency for striped bass to remain in northern waters through summer and winter; spawning in some Massachusetts rivers has been documented, but commercial fisheries during winter months have not taken place since the 1930s.

Development of the Fishery

Recreational fisheries for striped bass have a more contemporary beginning, surging after World War II. Major factors contributing to the rise in marine recreational fishing during the 1940s and 1950s comprise development of gas-driven outboard motors and the advent of fiberglass used in boat construction. With the availability of small affordable gas outboards, numerous anglers using small inexpensive tin boats left well-known fishing spots on the beach to explore new near-shore fishing opportunities in coastal waters and bays. Prior to this only those that could afford to hire or purchase larger, sturdy, wooden boats driven by inboard engines enjoyed the benefits of fishing coastal waters. By the 1960s, boat manufacturers began offering new fiberglass boat designs based on small center console models. This new class of durable 17- to 20-foot fiberglass hull with large inboard gas tanks, equipped with small, but powerful, gas outboards completely revolutionized salt water fishing for both sport and commercial fishermen.



Mackenzie Cuttyhunk bass boat.

In 1945, the Massachusetts Legislature decided that striped bass could only be landed in the Commonwealth if caught by hook and line; fish caught by any other means including netting, trapping or spearing was prohibited. These same prohibitions remain in place today. The only other restriction placed on the taking of striped bass was a minimum size, which remained at 16-inches from 1945 until the early 1980s. With this regulatory environment and the availability of a new class of small trailerable boats and motors, Massachusetts fishermen avidly sought out migratory schools of striped bass throughout the state's coastline from early spring until late fall. For more than twenty years between the 1950s and 1970s, striped bass sport and commercial fishermen were virtually indistinguishable.

Through the 1970s, it was common practice for anglers of all types to market a portion of their striped bass harvest. The lines between sport fishermen and commercial fishermen were blurred by those who fished part-time and those who fished full-time, by those who sold a part of their catch and those who sold them all, or by those who could only spend the time to catch and sell a few and those who had time to catch and sell a lot. The main points being, many anglers sold their fish and the more typical full-time commercial watermen, fishing with nets or traps, didn't really participate in the fishery.

A Resource of National Concern

Heavy fishing throughout the range during nearly a decade of failed juvenile production beginning after 1970 drove landings into precipitous decline. Stock rebuilding strategies implemented during the 1980s and 1990s ruptured the state's former profile of commercial fishing by increasing minimum size from 16 inches up to three feet and the imposition of annual harvest quotas that were reduced to 20% of the high levels recorded in the 1970s. Recreational fishing faced the same increases in minimum size and was delivered the new edict of daily creel limits that began at four fish but reduced to as low as one. This modern-day striped bass restoration effort institutionalized the way we manage marine fisheries on the east coast of the United States. Interstate government partners reinforced their commitments to cooperate with each other through the Atlantic States Marine Fisheries Commission (ASMFC) in order to achieve the objectives of the management program. At the same time, having witnessed the demise of entire year classes because of over fishing and degradation of environmental conditions in spawning and nursery areas, a growing social consciousness was directed towards the plight of the striped bass resource. A contingent of resource protectors developed that included conventional industry stalwarts from tackle manufacturers to fishing organizations, but the resource rebuilding campaign also attracted unconventional supporters that spanned from the entertainment industry to college campuses. With such broad state government and public support, early in the 1980s Congress began to fund research and management work in earnest and drafted special legislation to highlight the recovery of striped bass as a National concern.

A combination of more stringent regional rules were added to quotas, daily creel limits and large minimum size increases that included moratoriums on fishing for striped bass in Chesapeake Bay and some other spawning areas along the coast, as well as complete bans on commercial fishing in several states. It's thought that these actions helped rebuild striped bass spawning potential and sparked momentum in reproductive capacity when environmental conditions were favorable for survival of eggs and larvae. Spawning stock size quickly grew past known historical levels and the resource was declared fully recovered by 1995; since then, successively large year classes have been produced intermittently from a number of the major spawning locations and fishing effort and landings have increased consistent with careful liberalization of fishing regulations.

While fishery management during the resource recovery kept commercial fishing static, recreational fishing was not restrained by annual quotas. Recreational fishermen who had their roots in freshwater streams and lakes began switching attention to the coast in pursuit of striped bass. Traveling long-distances towing boat and trailer was no longer an ordeal, and public parking and access to coastal waters was readily available. The "Information Age" brought the Internet, and with it technology-savvy anglers became able to track discussions, whether it is about a new fishing ground or a nuance in striped bass science worthy of their attention. Desk-bound anglers soon became (internet) experts on fishing, science, resource management, or anything else that search engines could bubble-up. Coinciding with growth of the resource in the 1980s and 1990s was growth in the high-technology field, which in turn helped to bolster stock market and real estate investments. A growing segment of professionals with time and money settled into coastal

communities and soon afterward a large share of waterfront facilities became destined to support burgeoning fleets of new recreational boaters.

Today's Concerns

Because waters off Massachusetts are the epicenter for migratory populations of striped bass, resurgence of the resource has changed today's characterization of the striped bass fishery so that it differs significantly from that of the past. A true recreational sector exists; minimal daily creel limits don't hinder those interested in a day of leisure spent on the water. Likewise, avid sport anglers have found Massachusetts coastal waters to be a perfect extension of exotic winter fishing locales, but here schooling striped bass replace bonefish, permit and tarpon as their target. For-hire fisheries have enhanced opportunities for those willing to pay for catching striped bass and continue to offer employment and business prospects in the marine economy. Marinas, bait and tackle shops, specialty sporting stores, and popular journals catering to saltwater fishing enthusiasts have benefited by the comeback of this resource. Altogether, these factors have shaped Massachusetts into a Mecca for the country's recreational striped bass fishery.

The commercial fishery has also changed by attracting thousands of non-traditional participants who are lured by the thought of subsidizing an expensive hobby. In addition, many full-time watermen who once paid little attention to this fish now focus their attention on the harvest and sale of stripers to help offset annual incomes that persistently diminish as regulations on other fisheries escalate. Although quotas have increased since the 1980s, seasons are still used to delay the start of fishing until after July 4th.

Regulatory actions taken in recent years have chiefly been designed to address the progressive shortening of the season length, the concurrent market gluts and subsequent drop in the ex-vessel value of striped bass. In addition to raising the quota, other actions taken to curb these incidents have included increasing legal minimum size of striped bass from 28-inches to 34-inches, shortening the fishing week to four consecutive days beginning on Sundays, and adjusting daily possession limits from 40-fish to 30-fish. These measures have not been extremely effective; the length of the 2004 season was less than three weeks of fishing (Table 1) and average annual prices paid to fishermen have dropped consistently during the past five years (Figure 1), falling to about \$1.60 per pound in 2004. Ineffectiveness of the regulations is not very surprising since the leading factors that drive these conditions have remained unchanged - increased fishing effort along with increased abundance of fish.

Issuance of commercial striped bass fishing permits has risen to unprecedented levels, exceeding 5,500 permits in some years, but more often fluctuating around 5,000 (Table 1). Presently, permitting is relatively inexpensive, \$35 for a commercial rod and reel permit and \$30 more for a striped bass endorsement. Many full-time commercial fishermen feel that open-access to the fishery is the single most important factor responsible for poor market conditions. Often overlooked is that most permit holders never catch or sell a fish. Of 5,000 permits issued in 2003, only 2,000 individuals caught fish and only about 1,300 (26%) of them sold fish. Many of the 1,300, about 600 permit holders, sold 10 or fewer fish during the season. On the opposite end of this spectrum, 5% (270 permit holders) caught and sold about ¾ of the quota. Increased effort by the more experienced full-timers and increased catchability of fish, not the overall rise in number of permit holders, are most responsible for the conditions affecting the rate that quota is filled. *Little has been said here about extreme advances made to make precise electronic devices used to find and mark locations of fish more portable and more affordable for the small-boat market. There is no doubt that these sophisticated consumer products placed in the hands of proficient fishermen have radically hoisted the catchability of fish.*

Table 1. Attributes of the Massachusetts Striped Bass Commercial Fishery: 1990-2004.

SEASON	SEASON LENGTH	HARVEST		DEALER PERMITS	FISHING PERMITS
	(# of fishing days)	(POUNDS) 000s	(NUMBERS) 000s		
1990	93	160.6	6.3	95	1,498
1991	59	234.8	10.4	92	1,739
1992	39	239.2	11.3	135	1,861
1993	35	262.6	13.0	152	2,056
1994	24	199.6	10.4	150	2,367
1995	57	782.0	41.2	161	3,353
1996	42	696.8	38.3	179	3,801
1997	42	785.9	44.8	173	5,500
1998	28	822.0	45.3	180	5,540
1999	40	788.2	40.8	167	3,577
2000	36	779.7	40.2	137	3,280
2001	29	815.0	40.2	164	4,241
2002	21	924.9	44.9	132	4,587
2003	21	1055.4	55.4	151	4,858
2004	19	1204.1	--	130	4,422

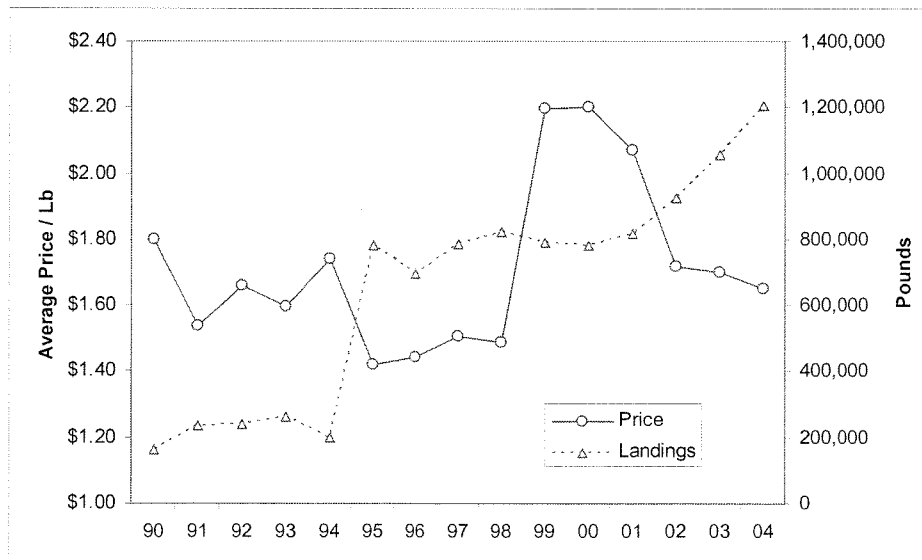


Figure 1. Average ex-vessel value and annual landings of striped bass.

Moving Forward

The recreational and commercial sectors no longer blend as they once did. In fact differences between commercial and recreational are often stark and opinions over what public policies should be applied to striped bass fisheries spark intense debate. The Massachusetts Division of Marine Fisheries and the Massachusetts Marine Fisheries Advisory Commission work hard to help determine and implement the best public policies that govern the management of our marine fisheries. In doing so for the striped bass commercial fishery, certain affirmations have been made:

- commercial fishing for striped bass has historical significance to the Commonwealth;

- commercial fishing for striped bass was once considered a part-time activity primarily conducted by those not fully engaged in commercial fishing, but now involves a number of full-time fishermen that take part in multiple fisheries;
- the striped bass resource was depleted because of fishing and environmental conditions, but was restored under strict regimens that allowed both commercial and recreational fisheries to flourish;
- and that the striped bass commercial fishery has been allowed to operate without limited-entry controls.

The 2005 commercial fishery should move forward with certain objectives that we believe are attainable and consistent with current policy.

1. Conduct the fishery without limited-access controls;
2. Conduct the fishery without demarcation of participants based on levels of experience or past performance in the fishery;
3. Consider redefining permit categories that increase fees;
4. Consider further differentiation in fees between resident and non-resident participants;
5. Consider prohibiting sale of striped bass caught by persons while engaged in for-hire fishing;
6. Consider lowering daily possession (trip) limits (from 30 to 20);
7. Consider reducing the number of days when fishing is allowed from 4 days to 3 days per week;
8. Consider changing current rules prohibiting importation of striped bass during times when the Massachusetts fishery is closed;
9. Consider changes to fish-length requirements;

Discussion

There is an existing control date that will expire in fall 2006 that could be used to limit entry and/or condition participation in this fishery. I don't recommend doing either at this time, as statistics show that most permit holders contribute little to commercial harvest rates. Creating a lower tier to harness those who are unproductive makes little sense. To do so would also contradict with the guiding principle of *continuing the tradition of open access participation in the fishery in an attempt to foster the cultural aspects of the fishery and to support those that may be interested in pursuing fishing as an occupation or as a gateway to other employment in the marine economy.*

There are several measures however that might serve to improve administration and conduct of the fishery that include changing permit requirements, permit fees, and restrictions on participation. The state's lowest-entry commercial fishing permit is a \$35 rod and reel permit, and with a \$30 endorsement attached, an individual could legally fish for and sell striped bass; a non-resident is afforded this same privilege for \$150, or \$100 for the rod and reel permit and \$50 for the endorsement. Manipulation of entry-level fees and permit categories as a management tool is long overdue. For instance, eliminating the Rod and Reel permit and requiring the Individual permit (\$65) for shore-based commercial fishermen and requiring the boat permit (\$130) for all other commercial fishing might be a deterrent for the most casual of fishermen while not being inconsistent with the guiding principle reiterated above. It would also help lower the agency's costly and time-consuming task of administering non-active fishery participants.

Although non-resident participation has been a longstanding component of our fishery, neighboring states have decided to limit commercial activity by eliminating the fishery, such as in

Maine and New Hampshire, or by closing access as in Rhode Island. In addition, with the present quota-based fishery, a more practical gauge applied to non-residents is warranted, particularly when some individuals may be capitalizing on fisheries in multiple states. Raising the non-resident cost of a permit to the legal maximum seems reasonable given present circumstances. The cost of the boat permit could increase from \$260 to \$650 and the striped bass endorsement could be raised to \$150, for a total of \$800.

The Massachusetts for-hire fishery has been one of the fastest growing segments of the marine economy during the past decade because of interest in striped bass. The practice of selling bass caught by clients while engaged in for-hire activity is both legal and not uncommon for charter boat operations, but the activity is often a subject of debate among fishermen and managers. Although legal by state standards, federally permitted (for-hire) vessels are not allowed to sell their catch. Additionally, questions about unfair play and Admiralty laws may be involved if a captain lowers passenger fees in trade for selling the catch and/or the catch is sold by the captain without permission of the paying passenger. Circumventing these questions and becoming consistent with federal law could be accomplished by prohibiting the sale of striped bass caught by passengers engaged in for-hire fishing. Such a rule would also reallocate a small portion of quota to the remaining members of the commercial fishery.

Table 2. Average daily landings during 2003 .

	AVERAGE POUNDS	AVERAGE # OF TRANSACTIONS
SUNDAY	54,274	352
MONDAY	42,553	272
TUESDAY	41,472	245
WEDNESDAY	39,446	198

Perhaps the most constructive way to modify activity in this fishery is by further reducing the length of the fishing week from 4 days to three days. While part-time commercial fishermen will not wish to give up Sundays, it's an obvious choice, as landings coincident with effort are always highest on Sunday (Table 2). Eliminating commercial activity on Sundays may produce an ancillary benefit for recreational fishermen because of less competition on the fishing grounds. Reducing the daily possession limit would increase impacts on the segment of fishermen who contribute most to the harvest, but to achieve a marked change in fishery performance the daily limit must be reduced to commercially unrealistic level of five fish. Combining a reduction in the daily possession limit to 20-fish with a three-day per week fishery is highly recommended at this time.

Overall marketability and benefit provided to the consumer might be advanced by reconsideration of the current seasonal prohibition on importations of striped bass coming into Massachusetts from other states. With proper documentation and reporting, enforcement officials should be able to control potential law breaking. Availability of seafood product year-long opposed to small season availability would help establish and stabilize superior market prices, not to mention accommodating a wider selection of healthy seafood product at restaurants and retailers. Most other states, even those without commercial fisheries, allow off-season sale of striped bass with proper documentation that shows origin of the fish (Appendix 1).

Finally, a maximum size limit may be a worthy consideration to hinder the irresponsible activity of high-grading fish that might be practiced by fishermen attempting to make the most profit on a daily limit; a maximum size would also add slightly more protection to the spawning stock. If a maximum size is implemented than lowering the minimum size may be warranted to

expand the legal slot. Since the smallest striped bass historically brought the highest market price, lowering the minimum size might create a small increase in marketing opportunities; but at lower sizes catch rates (and mortality) would increase and the quota could be reached even faster than in the recent past.

Appendix 1. Summary of regulations for states that allow sale of striped bass imports.

State	Sale of Imported Striped Bass Allowed?	Possession Limits	Documentation Required	Tagging Required	Treatment of hybrids
ME	Y	20" ≥ 1 fish ≤ 26" or 1 fish ≥ 40" fish ≥ 28"	Y	N	Allow sale
CT	Y		N	Affix any originating state's tag	<ul style="list-style-type: none"> • May be <28" with several provisions
NY	Y	24" ≥ TL ≤ 36"	<ul style="list-style-type: none"> • Evidence below FDA tolerances for PCB contamination • Licensed NY dealer • Report purchases by dealer from harvester (dealer to dealer reporting not required) 	Y	
DE	Silent			Affix any originating state's tag	bill of sale or receipt
PA	Y	Must meet size requirements of the source state.	Paper trail to the seller, not to the commercial fisherman who provided the fish to the seller.	Affix any originating state's tag	
VA	Y		bill of sale	Affix any originating state's tag	<ul style="list-style-type: none"> • Label with source information and receipt for any sale